

Digital Set-Top Box with Irdeto embedded

IR-ACE
IR-ACE M

User's Manual



The image on the front page is only applicable to IR-ACE models.

HUMAX
your prime time




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Safety

This STB has been manufactured to satisfy international safety standards. Please read the following safety precautions carefully.

- MAINS SUPPLY** : 90 - 250 V AC 50/60 Hz
- OVERLOADING** : Do not overload a wall outlet, extension cord or adapter as this may result in fire or electric shock.
- LIQUIDS** : The STB should not be exposed to dripping or splashing, and no objects containing liquids, such as base, should be placed on the apparatus.
- CLEANING** : Disconnect the STB from the wall outlet before cleaning.
Use a light damp cloth (no solvents) to dust the STB.
- VENTILATION** : The slots on top of the STB must be left uncovered to allow proper airflow to the unit.
Do not stand the STB on soft furnishings or carpets.
Do not expose the STB to direct sunlight, nor place it near a heater.
Do not stack electronic equipment on top of the STB.
- ATTACHMENTS** : Do not use any non-recommended attachments, as these may be hazardous or cause damage the STB.
- CONNECTION TO THE SATELLITE DISH LNB**
: Disconnect the STB from the mains before connecting or disconnecting the cable from the satellite dish.
FAILURE TO DO SO CAN DAMAGE THE LNB.
- CONNECTION TO THE TV**
: Disconnect the STB from the mains before connecting or disconnecting the cable from the satellite dish.
FAILURE TO DO SO CAN DAMAGE THE TV.
- EARTHING** : The LNB cable **MUST BE EARTHED**.
The earthing system must comply with SABS 061.
- LOCATION** : Place the STB indoors to avoid exposing it to lightning, rain or sun.

 <p>CAUTION RISK OF ELECTRIC SHOCK DO NOT OPEN</p>	TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.
	This symbol indicates "dangerous voltage" inside the product that presents a risk of electric shock or personal injury.
	This symbol indicates important instructions accompanying the product.

Warning!

Please do not insert metal or alien substance into the slots for the Modules and Smart Cards.
In doing so can cause damage to the STB and reduce its life span.

Copyright & Glossary

Copyright

- **VIACCESS™** is a trademark of France Telecom.
- **CryptoWorks(TM)** is a trademark of Philips Electronics N.V.
- **Irdeto** is a trademark of Mindport BV.
- **Nagravision** is a registered trademark of Kudelski S.A.
- **Conax** is a trademark of Telenor Conax AS.

Warning

- **HUMAX cannot be held responsible for any problems caused by the use of unofficial software. The use of software versions other than HUMAX official software will void the manufacturer's warranty. It is advised that only HUMAX formal software be used in all HUMAX product ranges.**

Glossary

- **Antenna**
A device that collects and radiates electromagnetic waves. This includes a satellite dish and a broadband antenna.
- **Forward Error Correction (FEC)**
An error control system for data transmission.
- **Frequency**
The number of cycles or events per second, expressed in of Hertz(Hz) units.
- **Intermediate Frequency (IF)**
A frequency to which a carrier frequency is shifted as an intermediate step in transmission or reception.
- **Low Noise Block (LNB) Downconverter**
A low noise microwave amplifier and converter which downconverts a range of frequencies to the IF range.
- **Packet Identifier (PID)**
A set of numbers that identifies transport stream packets containing data from a single data stream.
- **Polarisation**
Characteristic of an electromagnetic wave determined by the orientation of the electric field vector.
- **Quaternary Phase Shift Keying (QPSK)**
Phase-shift keying in which four different phase angles are used.
- **Service**
A channel into which a decoder or TV is tuned.
- **Transponder**
An automatic device that receives, amplifies and retransmits a signal on a different frequency.

References

1. DiSEqC 1.0 Connection

All our receivers are designed to be DiSEqC 1.0 compatible. This allows multiple antennae to be connected to the STB simultaneously.

If you have two or more fixed antennae or LNBs, you can use a DiSEqC 1.0 switch.

1. Connect the coaxial cable from the first LNB to the LNB 1 or LNB A DiSEqC switch input connector.
2. Connect the coaxial cable from the second LNB to the LNB 2 or LNB B DiSEqC switch input connector.
3. Do the same for the other LNBs.
4. Connect one end of a Coaxial cable to the RF DiSEqC switch output connector and the other end to the LNB IN socket on the STB.

2. DiSEqC 1.2 Connection

Please refer to page GB46.

3. Connecting a Satellite antenna

You can connect either a single satellite antenna directly to the digital receiver or several antennae via the converter box or multi-feed equipment LNB.

You can connect a further Sat-receiver (for example analogue) to the common antenna equipment receiver that has satellite signals.

4. Loop Via

If you have another analogue or digital STB and you wish to use the same LNB, then you can connect it via the loop via. Connect one end of a Coaxial cable to the LNB OUT on the STB and connect the other end to the LNB IN on your second STB.

5. Software Upgrading

The HUMAX digital set-top box is a highly sophisticated product-incorporating one of the best software applications.

Whenever a problem is found with this software or extra functions or enhanced applications are added, the software in the equipment must be upgraded.

In order to maintain correct product performance, it is essential to have the most Up-to-date software. The latest news and releases on software versions may be found at the HUMAX website - <http://www.humaxdigital.com>.

It is recommended that users register with HCSA (HUMAX Customer Service Area) and periodically check the availability of software upgrade.

There are three methods for upgrading the software:

- (a) set-top box to set-top box download (copies the software from the main unit into the slave unit);
- (b) PC to set-top box download (downloads the software directly from the PC to the model requiring upgrading);
- (c) OTA over-the-air (downloads the software, where the manufacturer reserves the right to decide when and where to release via the satellite system).

Over The Air (OTA) is simply another alternative for downloading software versions. However, the manufacturer reserves the right to decide when and where this software upgrade takes place by "beaming" the latest software versions over the air via satellite systems. Note that OTA is limited to certain geographical regions only, mainly due to different satellites having different footprints (areas where the signal can be received).

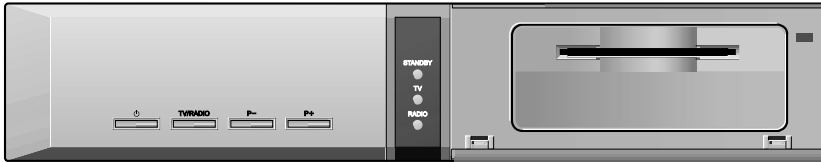
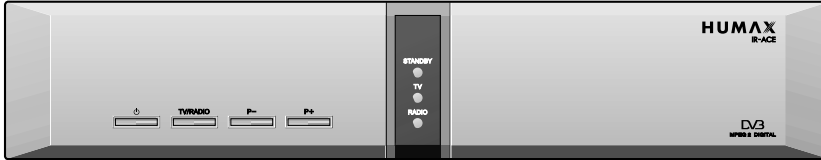
SUSS (TM) is an official trademark and logo for HUMAX loader software to perform OTA. The software upgrade via the satellite system can only occur under the following circumstances:

- 1) the equipment should have appropriate loader software;
- 2) the manufacturer decides to release software downloading via a designated satellite system;
- 3) the equipment must be properly "tuned" to the same satellite as the one used by the manufacturer.

STB Connections

Front Panel

IR-ACE



IR-ACE M



⏻ (STANDBY)

Press to switch between Operation and Standby modes.

TV/RADIO

Press to switch between TV and Radio modes.

P-

Use to change services down.

P+

Use to change services up.

V- (Model IR-ACE M only)

Use to volume down.

V+ (Model IR-ACE M only)

Use to volume up.

STANDBY LED (RED)

Indicates that the STB is under standby.

TV LED (GREEN)

The LED light goes on when in TV mode.

RADIO LED (YELLOW)

The LED light goes on when in RADIO mode.

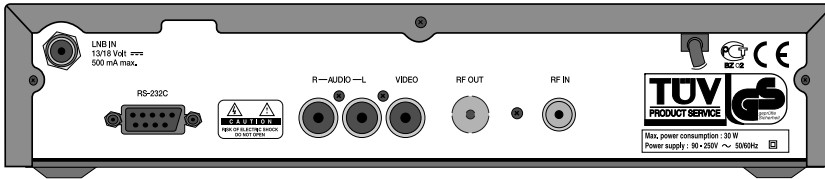
SLOT

For a CA Module with a smart card.

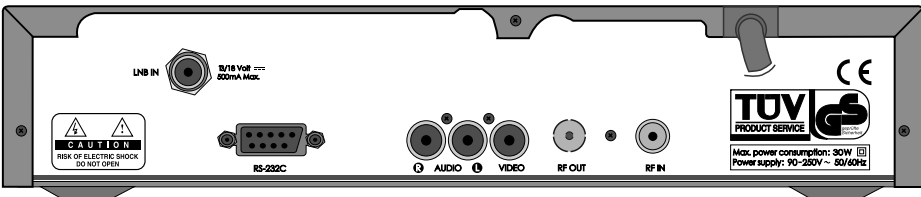
STB Connections

Rear Panel

IR-ACE



IR-ACE M



LNB IN

Use to connect an antenna.

RS-232C

Use when connecting to your PC.

AUDIO OUTPUT

Audio signal from your STB to VCR or TV.

VIDEO OUTPUT

Video signal from your STB to VCR or TV.

RF OUT

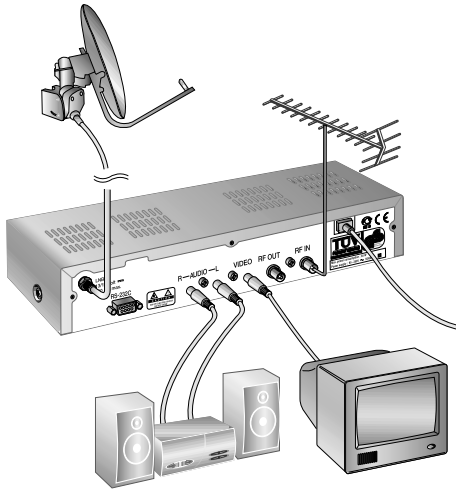
If your TV doesn't have a RCA/Cinch Jack, use to connect your TV.

RF IN

Use to connect a terrestrial antenna.

STB Connections

There are several ways of connecting the STB to your existing Audio/TV system. For best results, we recommend using one of the following set-ups:



Note: STB model IR-ACE shown; connections are the same for model IR-ACE.

TV only (with RCA / Cinch)

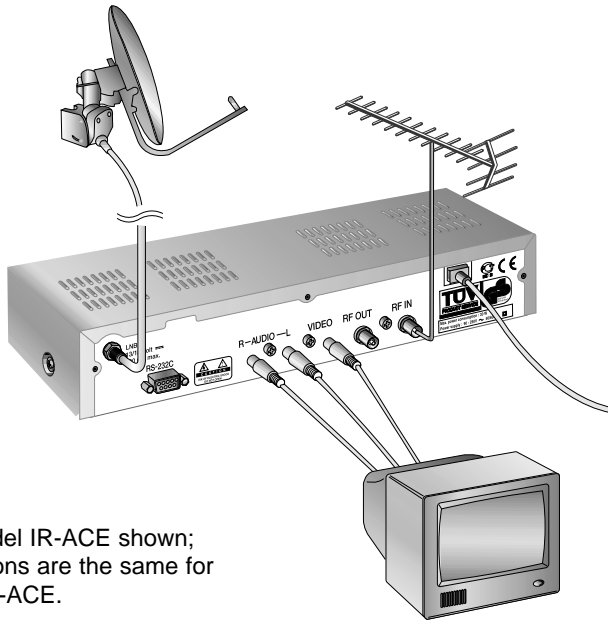
1. Connect one end of RCA/Cinch cable to the RCA/Cinch socket on the STB and the other end to a RCA/Cinch socket on your TV.
If your TV doesn't have a RCA/Cinch socket, connect one end of RF cable to the RF OUT on STB and the other end to a RF input socket on your TV.
2. Connect the coaxial cable from the LNB to the LNB IN socket on the STB.

TV with Terrestrial antenna

1. Connect one end of RCA/Cinch cable to the RCA/Cinch socket on the STB and the other end to a RCA/Cinch socket on your TV.
2. If your TV doesn't have a RCA/Cinch socket, connect one end of RF cable to the RF OUT on STB and the other end to a RF input socket on your TV.
3. Connect one end of RF cable to the RF IN on the STB and the other end to a terrestrial antenna connection or the socket for public antenna on the wall.
4. Connect the coaxial cable from the LNB to the LNB IN socket on the STB.

With a Hi-fi System

1. Connect an RCA/Cinch stereo cable from the AUDIO L,R sockets on the back of the STB to the LINE, AUX, SPARE OR EXTRA input sockets on your Hi-fi system.

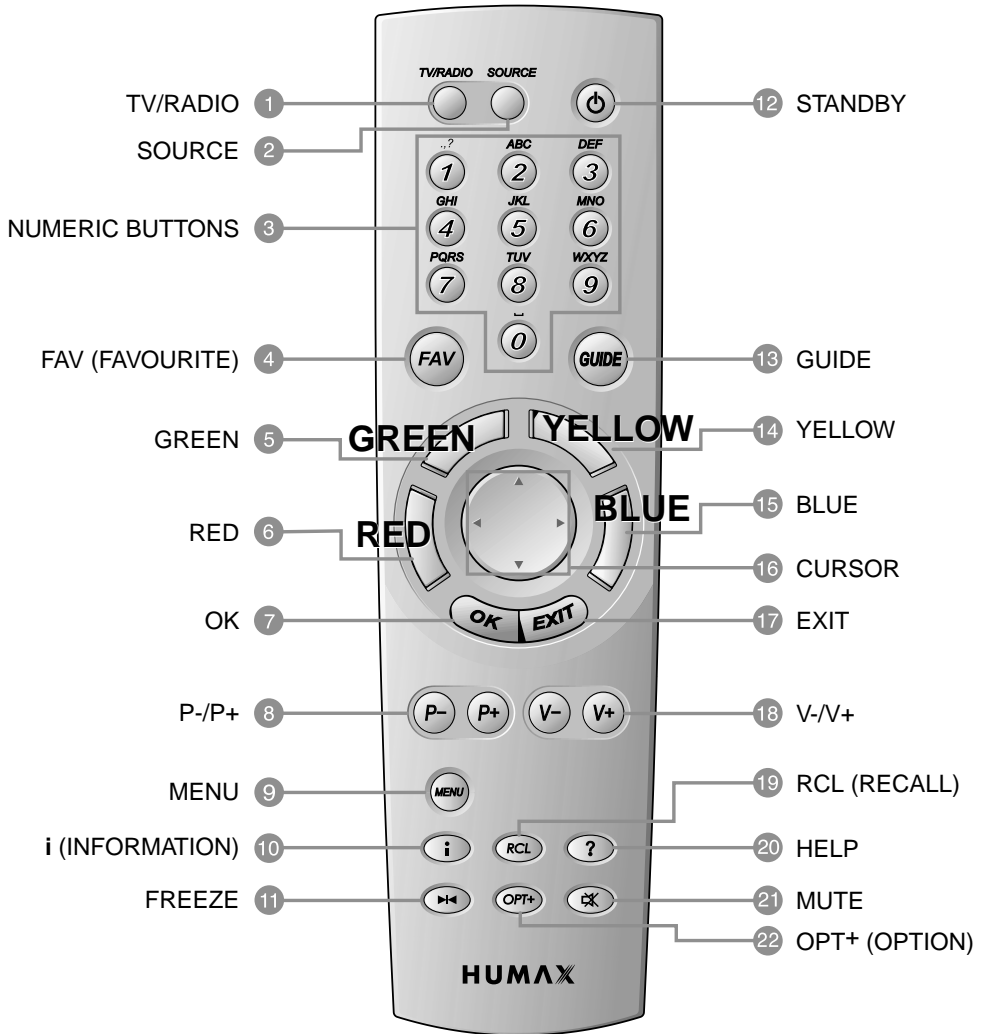


Note: STB model IR-ACE shown; connections are the same for model IR-ACE.

TV with Motorised System (DiSEqC 1.2)

1. Connect one end of a RCA/Cinch cable to the RCA/Cinch connector on the STB and the other end to a RCA/Cinch socket on your TV.
2. Connect one end of a RCA/Cinch cable to the RCA/Cinch connector on the STB and the other end to a RCA/Cinch socket on your VCR.
3. Connect the coaxial cable from the LNB of your motorised system(DiSEqC 1.2 Motor) to the LNB IN socket on the STB.

Remote Control Unit





- 1 TV/RADIO**
Press to switch between TV and Radio modes.
- 2 SOURCE**
Press to select the TV/SAT mode.
- 3 NUMERIC BUTTONS**
Press to select a service, enter your PIN code or number on a menu.
- 4 FAV (FAVOURITE)**
Press to see the current service configuration or edit during A/V play.
- 5 GREEN**
Press to select a Service Favourite in the Service List. This button functions in the same way as the GREEN button icon on a menu.
- 6 RED**
Press to select a Service All in the Service List. This button functions in the same way as the RED button icon on a menu.
- 7 OK**
Press to display the service list. This button can be used to select the item on the menus.
- 8 P-/P+**
Programme up/down buttons.
Press to move to the next or previous service.
Press to move up or down pages on a menu.
- 9 MENU**
Press to display the Main Menu on the screen or return to the screen from a sub menu screen.
- 10 i (INFORMATION)**
Press to display the programme information box on the screen.
- 11 FREEZE**
Press once to freeze the screen picture.
Press again to return to normal mode.
- 12 STANDBY**
Press to switch between Operation mode and Standby mode.
- 13 GUIDE**
Press to display the TV/Radio Electronic Programme Guide
- 14 YELLOW**
Press to select a Service Network in the Service List. This button functions in the same way as the YELLOW button icon on a menu.
- 15 BLUE**
Press to select a Service Alphabet in the Service List. This button functions in the same way as the BLUE button icon on a menu.
- 16 CURSOR**
Press to move the highlight bar for selecting options on the menus.
This button can be used to change services (up/down) and increase or decrease the audio volume (left/right).
- 17 EXIT**
Press to return to the previous menu or screen.
- 18 V-/V+**
Volume up/down buttons.
Press to increase or decrease the volume.
- 19 RCL (RECALL)**
Press to select the service previously viewed.
- 20 HELP**
Press to display the help box on the screen.
- 21 MUTE**
Press to cut the sound off temporarily.
- 22 OPT+ (OPTION)**
Press to enter the sub menu for selecting Soundtrack and Subtitle.
This button can be used to reserve a programme in the TV Guide.

• **Please note** : The design of the Remote Control Unit may be changed without advance notice.

Function Guide




Information Box (I-Plate)

The detailed information on a service and its event is automatically displayed at the bottom of the screen (I-Plate) whenever a service changes. To obtain this information when watching a service, press the **i** () button. If you press the **i** () button again while the I-Plate is displayed, the I-Plate disappears.

The I-Plate is divided into a “service information” part and an “event information” part.

Service Part

The service information is situated on the left side of the I-Plate and consists of the following items:

- Current Time, Dolby Digital Symbol if there is an available Dolby service.
- Service name, Service Number,  icon.
- Subtitle/Teletext/Scrambling symbol displayed according to the service attributes.
- Progressive Signal Quality bar.

Event Part






The event information is situated on the right side of the I-Plate and consists of the following items:

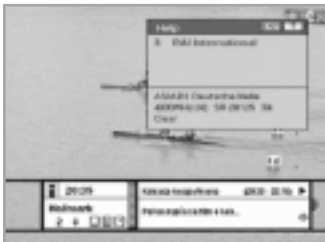
- Event name and, duration time of the event.
- Description of the event, status of the reserved event.

There are two types of event information, present event information and following event information.

If the following one is available, the  icon is displayed.

To switch between the present and following ones, proceed as follows,









1. Activate the I-Plate using the **i** () button.
2. If the present event information is available, it is displayed on the I-Plate.
3. If the following event information is available, the  icon is displayed.
4. Press the  button to switch to the following event information.
5. Press the  button to return to the present event information.
If the present one is not available, the  icon is not displayed and cannot return to from the following one.



If you press the **HELP** (?) button while the I-Plate is displayed, the detailed description of the event will be displayed on the help window instead of help messages. If there is no available data for the detailed description on the air, the help message is displayed on the help window instead.

Changing Services



There are several ways to change a service.

- Use the **NUMERIC** buttons: key in the service number using the **NUMERIC** buttons and press the **OK** () button. If the **OK** () button is not pressed, the service is automatically changed to the service number keyed in after about 5 seconds.
- Use the  buttons: the service is changed up/down sequentially if the  button is pressed.
- Use the  buttons: the service is changed up/down sequentially if the  button is pressed.
- Use the service list or Guide list: refer to the following description.
- Use the **RCL** () button: return to the latest viewed service when the **RCL** () button is pressed.


There are two types of service, TV and RADIO.

To switch between them, press the **TV/RADIO** button.

To change a service in the service list or guide list, proceed as follows:







1. Activate the service list or guide list.
(Refer to the following GB15, 17 pages on how to activate them)
2. Select the desired service using the  button.
3. Press the **OK** () button, and the service is changed to the desired one.

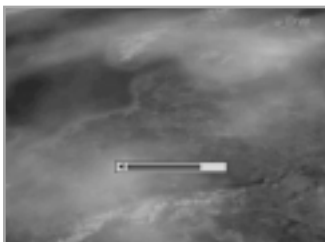
Teletext Service

The **TELETEXT** () icon appears on the I-Plate if there is available teletext data in the service.

(**NOTE:** The TV supports the teletext decoder internally for watching it, since the teletext data is decoded by the TV.)

Volume Control

To adjust the volume level, use the  button or the  button. To mute the audio, press the **MUTE** () button. To recover the audio level, press the **MUTE** () button again, or the ,  button.






Function Guide



Soundtrack

To change the audio language in the current service, proceed as follows:

1. Press the **OPT+** () button and select the Soundtrack item.
2. Press the **▶** button to activate the list of supported audio languages.
3. Select the desired audio language in the list using the **▲/▼** keys.
4. Select the audio mode (mono, stereo, Dolby) in the desired audio language using the **◀/▶** buttons.
5. Press the **OK** () button to confirm the change, or the **EXIT** () button to cancel the change.

The selected audio language is preserved regardless of the change of service.


If the selected audio language is invalid from some reason, the default audio language will be selected. (The default audio language can be set on the Language Setting in the Main menu.)

If an audio language is encoded by Dolby Digital, the Dolby Digital Symbol will appear in the list of audio languages.




NOTE: The Dolby decoder with optical port shall be connected externally to decode the Dolby Digital audio.



Subtitle

If there is a subtitle service available on the air, the subtitle icon () will appear in the I-Plate.

To select the subtitle language, proceed as follows:

1. Press the **OPT+** () button and select the Subtitle item.
2. Press the **▶** button to activate the list of supported subtitle languages.
3. Select the desired subtitle language in the list using the **▲/▼** keys.
4. Press the **OK** () button to confirm the change or press the **EXIT** () button to cancel the change.

Main Menu Guide



The Main menu contains the TV Guide, Parental Control, Installation and Utility menus. (For more detailed information about menu structure, please refer to the Menu Map page at the end of the User's Manual.)

1. TV Guide

The TV Guide is useful when all the services are being navigated, since it offers all possible viewing options.

The TV Guide supplies the following information:

- Start/end time of all available services.
- Short description of all available services.
- Extended description of all available services.

For easy navigation, the TV Guide supplies 4 modes: Now, Weekly, Reserved and Quick.

2. Parental Control

Parental Control offers all items related to the PIN code and parental control.

- Censorship classification: the parental control level can be specified.
- Change PIN: the PIN code can be modified.

The PIN code is an important password when reconfiguring the STB, locking some services and giving access to the locked services.

3. Installation

Installation offers the following functions:

- Reconfiguration of system settings.
- Organisation of service list.
- Search of services.
- System status.
- Information on the conditional access system.
- Restoration to the default setting.

4. Utility

Utility offers useful functions such as:

- Calendar.
- Biorhythm.

Main Menu Guide

1. TV Guide

The TV Guide offers more detailed information on the service (both TV and Radio services) such as start/end time, short description and extended description. The service can be reserved in the TV Guide.

To activate the TV Guide menu, do one of the following:

- Press directly the **GUIDE** (Ⓜ) button
- Select the TV Guide in the Main menu

If the **TV/RADIO** (○) button is pressed with the TV Guide displayed, the service list is toggled between the TV service and Radio service.

There are 4 modes in TV Guide: NOW, WEEKLY, RESERVED and QUICK.

- **NOW**: This mode displays information on the present services and following services.
- **WEEKLY**: This mode displays information on all the services for one week.
- **RESERVED**: This mode displays information on all the services reserved by a user.
- **QUICK**: This mode displays information on the proceedings of the current service while a full video screen is displayed on the background.

The colour buttons are used to change the mode of the TV Guide.



- **RED** button: Used to select NOW mode.
- **GREEN** button: Used to select WEEKLY mode.
- **YELLOW** button: Used to select RESERVED mode.
- **WHITE** button: Used to select QUICK mode.




Now mode

The NOW mode displays information on the present services and following services. The information includes service name, event name and start/end time of an event.

To activate the NOW mode and surf the services, proceed as follows:

1. Activate the TV Guide menu using the **GUIDE** () button or via the Main menu.
2. Press the **RED** button to select the NOW mode. The NOW mode contains a service list with information on the left side of the screen, and the video is zoomed out on the right side of the screen.
3. To watch the desired service, use the **▲/▼** button to select it and press the **OK** () button, or use the **(P-)/(P+)** button to select it. (The service list can be paged-up/down using the **◀/▶** button.) The service then plays in the video zoomed out and the associated information is displayed at the bottom of the screen.

To reserve a programme in the NOW mode, proceed as follows:

1. Use the **▲/▼** button or **(P-)/(P+)** button to select the desired service.
2. If the desired service is selected, press the **OPT+** () button to reserve it.
3. There are two modes in the reservation menu: "Daily" and "Weekly". "Daily" means that a service event will play daily, and "Weekly" means that a service event will play weekly.

Main Menu Guide




Weekly mode


The WEEKLY mode displays information about all the services that will be transmitted over a week.

The information includes service name, event name and start/end time of the event.

To activate the WEEKLY mode, proceed as follows:

1. Activate the TV Guide menu using the **GUIDE** () button or via the Main menu.
2. Press the **GREEN** button to select WEEKLY mode.

To reserve a service event, proceed as follows:

1. Select the desired service event using the **▲/▼/◀/▶** button.
2. Press the **OPT+** () button to reserve the event.



If the selected event is currently playing, there are two modes in the reservation menu: "Daily" and "Weekly".

If the selected event is playing in the future, there are three modes in the reservation menu: "Once", "Daily" and "Weekly".

In "Daily" mode, a service event will play daily.

In "Weekly" mode, a service event will play weekly.

In "Once" mode, a service event will play only once.

If the **OK** () button is pressed, the small box with a service list appears. The service can be changed in this box using the **▲/▼** and the **OK** () buttons.





Reserved mode

The RESERVED mode displays the services which have been reserved.

In this mode, the reservation mode can be changed.

The service can also be removed from the reservation list.

To change the mode or remove a service event of, proceed as follows in RESERVED mode:


- Activate the TV Guide menu using the **GUIDE** () button or via the Main menu.
- Press the **YELLOW** button to select the RESERVED mode.
- Select the desired service event using the **▲/▼/◀/▶** buttons.
- Press the **OPT+** () to activate the reservation menu.
Next, change the mode or remove the event.



Quick mode

The QUICK mode displays information on the proceedings of the current service while a full video screen is displayed in the background.

To activate the QUICK mode, proceed as follows:

1. Activate the TV Guide menu using the **GUIDE** () button or via the Main menu.
2. Press the **BLUE** button to select QUICK mode.
3. Select the desired service using the **▲/▼** button.
4. Select the desired event (present event or following event) using the **◀/▶** button.

The time line consists of three blocks, each block with a 30-minute time-line.

The blue vertical line indicates the current time in the time-line.

The black and white bar indicates the start/end time of the event in time-line.

(The bar will be black depending on the time the event took place.)

Main Menu Guide



2. Parental Control

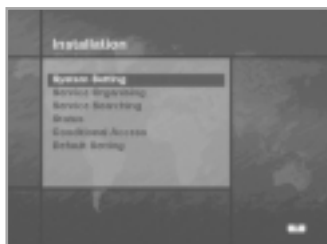
In the Parental Control menu, it is possible to change the Parental Guidance Rating and the PIN code.

To set the Parental Guidance Rating, proceed as follows:

1. Activate the Parental Control menu via the Main menu.
(To activate it, the PIN code should be entered).
2. Select the Censorship classification item using the ▲/▼ button.
3. Select the desired Parental Guidance Rating using the ◀/▶ button.
4. The Parental Guidance Rating is given as age-based numbers, "no block", "10", "13", "16", "18" and "total block".
5. Press the **OK** (OK) button to confirm the change.
** The default PIN code is **0000**.

To change the PIN code, proceed as follows:

1. Activate the Parental Control menu via the Main menu.
(To activate it, the PIN code should be entered).
2. Select the Old PIN code menu using the ▲/▼ button.
3. Enter the Old PIN code using numeric buttons. When four digits have been entered, the cursor will automatically be moved to the New PIN code menu.
4. Enter the new PIN code in the New PIN code menu. When four digits have been entered, the cursor will automatically be moved to the Verify Changed PIN Code menu.
5. Enter the new PIN code again to verify it. If it is correct, then the new PIN code will be saved. If incorrect, then the message "PIN code mismatch" will be displayed.



3. Installation

The INSTALLATION menu supplies the following functions:

- Configuration of miscellaneous functions such as Language Setting, Time Setting, etc.
- Organization of Service List
- Search for services
- Information on STB

3-1. System Setting

This sub-menu supplies the miscellaneous functions.

Language Setting



The Language Setting menu supplies Menu Language, Audio Language and Subtitle Language.



Menu Language

The menu language is a language used in the text of the menu.

To change the menu language, proceed as follows:



1. Activate the Language Setting menu via the Main menu.
2. Select the Menu Language using the ▲/▼ button and press the **OK** () button.
3. When the small box with the supported language list appears, select the desired language using the ▲/▼ button.
4. If the desired menu language is selected, press the **OK** () button to confirm.



Audio Language

The audio language is a language selected as a default audio when a service is playing. It is also possible to change the audio language via the Soundtrack menu in the Option List menu.

To change the audio language, proceed as follows:

1. Activate the Language Setting menu via the Main menu.
2. Select the Audio Language menu using the ▲/▼ button and press the **OK** () button.
3. When the small box with the supported language list appears, select the desired language using the ▲/▼ button.
4. If the desired audio language is selected, press the **OK**() button to confirm.



Main Menu Guide

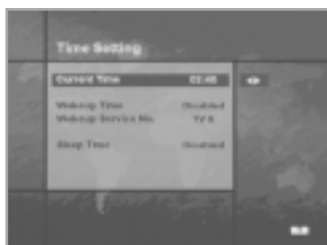


Subtitle Language

The subtitle language is a language selected as a default when a service with subtitles is playing. It is also possible to change the subtitle language via the Soundtrack menu in the Option List menu.

To change the subtitle language, proceed as follows:

1. Activate the Language Setting menu via the Main menu.
2. Select the Subtitle Language menu using the ▲/▼ button and press the **OK** () button.
3. When the small box with the supported language list appears, select the desired language using the ▲/▼ button.
4. If the desired subtitle language is selected, press the **OK** () button to confirm it.





Time Setting

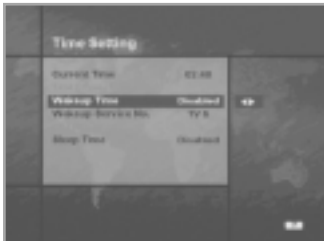
The Time Setting menu supplies the following functions:

- Set the current time.
- Disable/Enable the wake-up timer.
- Set the wake-up service. The wake-up service is a service that will play when STB starts after a wake-up timer has expired.
- Disable/Enable the sleep timer.

Current Time



To set the current time, proceed as follows:

1. Activate the Time Setting menu via the Main menu.
2. Select the Current Time item using the ▲/▼ button.
3. Set the current time using the ◀/▶ button (the current time increases by 30 minutes when the ▶ button is pressed and decreases by 30 minutes when the ◀ button is pressed.)
4. Press the **OK** () or **EXIT** () button to confirm.






Wakeup Time

To disable or enable/set the wake-up timer, proceed as follows:

1. Activate the Time Setting menu via the Main menu.
2. Select the Wakeup Time item using the ▲/▼ button.
3. To disable the wake timer, set to “Disable” using the ◀/▶ button.
4. To enable and set the wakeup timer, set the item to “00:00” using the button. (The numeric mark, “0..9” appears on the right of the Wake Time item). Set the desired wake-up time using the **NUMERIC** buttons.
5. Press the **OK** () or **EXIT** () button to confirm.



Wakeup Service No.

To set the wake-up service, proceed as follows:

1. Activate the Time Setting menu via the Main menu.
2. Select the Wakeup Service No. item using the ▲/▼ button.
3. Set the service number using the ◀/▶ button or **NUMERIC** buttons.
The service type (TV or RADIO) can be changed using the **TV/RADIO** () button. The service name is also displayed under the Wakeup Service No. item.
4. Press the **OK** () or **EXIT** () button to confirm.

Sleep Time

To disable or enable/set the sleep timer, proceed as follows:

1. Activate the Time Setting menu via the Main menu.
2. Select the Sleep Time using the ▲/▼ button.
3. To disable the sleep timer, set the item to “Disable” using the ◀/▶ button.
4. To enable and set the sleep timer, set the item to “00:00” using the ◀/▶ button. (The numeric mark, “0..9” appears on the right of the Sleep Time item) In this state, set the desired sleep time using the **NUMERIC** buttons.
5. Press the **OK** () or **EXIT** () button to confirm.

Main Menu Guide





A/V Output Setting

The A/V Output Setting menu supplies menus that configure the functions related to Audio and Video output.

- Configure the Audio output of RCA (Cinch) Jack as Mono or Stereo mode.
- Configure the screen aspect ratio (4:3 or 16:9) of the TV connected to STB.
- Configure the video display format (Centre or Letter-box) on the TV.
- Configure the RF modulator.
- Configure the NTSC mode. There are two NTSC modes, NTSC 3.58 and NTSC 4.43. The NTSC 3.58 is more popular. According to the TV type, select the suitable NTSC mode.



Audio Output

To configure the audio output mode of RCA jack, proceed as follows:

1. Activate the A/V Output Setting via the Main menu.
2. Select the Audio Output item using the ▲/▼ button.
3. Select the desired audio output using the ◀/▶ button.
There are two modes: STEREO and MONO.
4. Press the **OK** () or **EXIT** () button to confirm.



Screen Mode

To configure the TV screen mode, proceed as follows:

1. Activate the A/V Output Setting via the Main menu.
2. Select the Screen Mode item using the ▲/▼ button.
3. Select the desired TV screen mode according to the connected TV using the ◀/▶ button. There are two modes: 16:9 and 4:3.
4. Press the **OK** () or **EXIT** () button to confirm.

Display Format

To configure the display format on the TV, proceed as follows:

1. Activate the A/V Output Setting via the Main menu.
2. Select the Display Format item using the ▲/▼ button.
3. Select the desired display format depending on the TV using the ◀/▶ button. There are two mode pairs depending on the type of TV. If the TV supports only the 4:3 mode, there is one mode pair such as Centre and Letter-Box mode. If the TV supports the 16:9 mode, there is another mode pair such as Full and Pillar-box mode.
4. Press the **OK** () or **EXIT** () button to confirm.

The display format can be appropriately configured according to the selected Screen Mode.



If the Screen Mode is selected as 4:3, there are two modes, Centre and Letter-box in the display format. If the video is formatted as 16:9 and the display format selected as Centre mode, the right and left portions of the video are cut off to fit the 16:9 video into the 4:3 TV screen. If the video is formatted as 16:9 and the display format selected as Letter-box mode, the video is vertically shrunk to fully display on the 4:3 TV screen. In that state, the top and bottom of the TV screen are blacked out. If the video is formatted as 4:3, the display format is not applicable when the screen mode is selected as 4:3.

If the Screen Mode is selected as 16:9, there are two modes, Full and Pillar-box, in the display format. If the video is formatted as 4:3 and the display format selected as Full mode, the video is expanded to fit the 4:3 video into the 16:9 TV screen. If the video is formatted as 4:3 and the display format selected as Pillar-box mode, the video is displayed on the centre of the 16:9 TV screen without modification. The right and left sides of the TV screen are blacked out. If the video formatted as 16:9, the display format is not applicable when the screen mode is selected as 16:9.

Main Menu Guide

NTSC Mode

To configure the NTSC mode on the TV, proceed as follows:

1. Activate the A/V Output Setting via the Main menu.
2. Select the NTSC Mode item using the ▲/▼ button.
3. Select the desired NTSC Mode using the ◀/▶ button.
4. Press the **OK** () or **EXIT** () button to confirm.

UHF Tuning

The UHF Tuning menu supplies the following functions:

- Set the UHF channel (CH28 ~ CH69).
- Set the PAL standard (PAL B, PAL G, PAL D, PAL K, PAL I).
- Set the frequency offset.





Other Setting

The Other Setting menu supplies the following functions:

- Set the level of OSD transparency. There are two levels: opaque 50% transparent.
- Set the duration time of the Info. Box display. The duration time can be set from 0 to 20 seconds.
- Set the Menu Mode, which changes the menu format according to the video format (NTSC, PAL, Auto). If the TV supports only the NTSC format, set the menu mode to NTSC. If the TV supports only the PAL format, set the menu mode to PAL. If the menu mode is set at Auto, the menu format is automatically changed according to the format of the decoded video.



OSD Transparency

To set the OSD transparency, proceed as follows:

1. Activate the Other Setting menu via the Main menu.
2. Select the OSD Transparency item using the ▲/▼ button.
3. Select the desired level between Opaque and Transparent modes using the ◀/▶ button.
4. Press the **OK** () or **EXIT** () button to confirm.



Info. Box Display Time

To set the duration time of Info. Box display, proceed as follows:

1. Activate the Other Setting menu via the Main menu.
2. Select the Info. Box Display Time using the ▲/▼ button.
3. Select the desired duration time using the ◀/▶ button.
4. Press the **OK** () or **EXIT** () button to confirm.

Menu Mode

To set the menu mode, proceed as follows:

1. Activate the Other Setting menu via the Main menu.
2. Select the Menu Mode item using the ▲/▼ button.
3. Select the desired menu mode using the ◀/▶ button.
4. Press the **OK** () or **EXIT** () button to confirm.



3-2 Service Organising

The Service Organising menu supplies several organising methods:

- Organisation of TV services,
- Organisation of Radio services,
- Organisation of services sorted by a network name,
- Deletion of services belonging to a satellite.

Main Menu Guide

Organise TV Services

The Organise TV services menu supplies two organisation methods: Organise All Services and Organise Favourites. Each offers a method of organisation with its own characteristics.



Organise All Services

The services are sorted according to the service number in the Organise All Services menu.

Each service can be deleted from the TV service list, moved to another position, locked or skipped when zapping the service.

To delete the service from the service list, proceed as follows:

1. Activate the Organise All Services menu for TV services via the Main menu.
2. Select the desired service in the service list using the **▲/▼/◀/▶** button.
The **⏪/⏩** button can be used to page up/down the service list.
3. Press the **RED** button while the desired service is selected. The service is then marked in grey.
4. Mark all the desired services using the above method. If a service is to be left unmarked, select it and press the **RED** button again (i.e. the **RED** button toggles the grey mark.)
5. Press the **OK** (**OK**) button to delete all the marked services, otherwise press the **EXIT** (**EXIT**) button to cancel.

To move a service to another position in the service list, proceed as follows:

1. Activate the Organise All Services menu via the Main menu.
2. Select the desired service in the service list using the **▲/▼/◀/▶** button.
The **⏪/⏩** button can be used to page up/down the service list.
3. Press the **GREEN** button while the desired service is selected. The **◆** icon then appears beside the service number.
4. Move the selected service to the desired position using the **▲/▼/◀/▶** button. The **⏪/⏩** button can be used to move across a page in the service list.
5. Press the **OK** (**OK**) or **GREEN** button to confirm, otherwise press the **EXIT** (**EXIT**) button to cancel.

To lock a service in the service list, proceed as follows:

1. Activate the Organise All Services menu via the Main menu.
2. Select the desired service in the service list using the ▲/▼/◀/▶ button.
3. The ⏪/⏩ button can be used to page up/down the service list.
4. Press the **YELLOW** button. The 🔒 icon then appears at the end of the service name. If the **YELLOW** button is pressed again, the 🔒 icon disappears.
5. Press the **OK** (OK) button to confirm or the **EXIT** (EXIT) button to cancel.

To skip the service when zapping it, proceed as follows:

1. Activate the Organise All Services menu via the Main menu.
2. Select the desired service in the service list using the ▲/▼/◀/▶ button.
3. The ⏪/⏩ button can be used to page up/down the service list.
4. Press the **BLUE** button. The ⏪ icon then appears at the end of the service name. If the **BLUE** button is pressed again, the ⏪ icon disappears.
5. Press the **OK** (OK) button to confirm or the **EXIT** (EXIT) button to cancel.

Main Menu Guide



Organise Favourite Services



The services are sorted according to favourite groups in the Organise Favourites menu.

There are three columns: the favourite group column, the favourite list column and the service list column containing services not belonging to any favourite group.


The Organise Favourites menu supplies the following functions:

- Add a service to a favourite group.
- Remove a service from a favourite group.
- Move a service to another position in a favourite list.
- Lock a service in a favourite list.
- Skip a service in a favourite list when zapping the service.


To add a service to a favourite group, proceed as follows:

1. Activate the Organise Favourite menu for TV services via the Main menu.
2. Move the cursor to the favourite group column using the ◀/▶ button. If the favourite group column is selected, the column is highlighted.
3. Select a favourite group in the favourite group column using the ▲/▼ button.
4. Move the cursor to the service list column using the ◀/▶ button. If the service list column is selected, the column is highlighted.
5. Select the desired service in the service list column using the ▲/▼ button, then press the **OK** () button to move it.
6. Press the **EXIT** () button to confirm.

To remove a service from a favourite group, proceed as follows:

1. Activate the Organise Favourites menu for TV services via the Main menu.
2. Move the cursor to the favourite group column using the ◀/▶ button. If the favourite column is selected, the column is highlighted.
3. Select a favourite group in the favourite group column using the ▲/▼ button.
4. Move the cursor to the favourite list column using the ◀/▶ button. If the favourite list column is selected, the column is highlighted.
5. Select the desired service in the favourite list column using the ▲/▼ button and press the **RED** button to mark the service.
6. Press the **OK** () button to remove the marked services from a favourite list.

To skip or lock a service in a favourite list, proceed as follows:

1. Activate the Organise Favourites menu for TV services via the Main menu.
2. Move the cursor to the favourite group column using the ◀/▶ button.
If the favourite column is selected, the column is highlighted.
3. Select a favourite group in the favourite group column using the ▲/▼ button.
4. Move the cursor to the favourite list column using the ◀/▶ button.
If the favourite list column is selected, the column is highlighted.
5. Select the desired service in the favourite list column using the ▲/▼ button and press the **YELLOW/BLUE** button to lock/skip the service. To undo the action, press the button again.
6. Press the **OK** () button to confirm.






Organise Radio Services

Organise All Services

The services are sorted according to the service number in the Organise All Service menu.

Each service can be deleted from the RADIO service list, moved to other position, locked or skipped when zapping the service.

To delete the service from the service list, proceed as follows:

1. Activate the Organise All Services menu for RADIO services via the Main menu.
2. Select the desired service in the service list using the ▲/▼/◀/▶ button.
The  button can be used to page up/down the service list.
3. Press the **RED** button. The service is then marked in grey.
4. Mark all desired services using the above method. If a service is to be left unmarked, select it and press the **RED** button again.
The **RED** button toggles the grey mark.
5. Press the **OK** () button to delete all marked services. or press the **EXIT** () button to cancel.

Main Menu Guide

To move a service to another position in the service list, proceed as follows:

1. Activate the Organise All Services menu via the Main menu.
2. Select the desired service in the service list using the ▲/▼/◀/▶ button.
The ⏪/⏩ button can be used to page up/down the service list.
3. Press the **GREEN** button with the desired service selected.
The ⬇ icon then appears beside of the service number.
4. Move the selected service to the desired position using the ▲/▼/◀/▶ button. The ⏪/⏩ button can be used to move across a page in the service list.
5. Press the **OK** (OK) or **GREEN** button to confirm, otherwise press the **EXIT** (EXIT) button to cancel.

To lock the service in the service list, proceed as follows:

1. Activate the Organise All Services menu via the Main menu.
2. Select the desired service in the service list using the ▲/▼/◀/▶ button.
The ⏪/⏩ button can be used to page up/down the service list.
3. Press the **YELLOW** button. The 🔒 icon then appears at the end of the service name. If the **YELLOW** button is pressed again, the 🔒 icon disappears.
4. Press the **OK** (OK) button to confirm.
Otherwise press the **EXIT** (EXIT) button to cancel.

To skip the service in zapping the service, proceed as follows:



1. Activate the Organise All Services menu via the Main menu.
2. Select the desired service in the service list using the ▲/▼/◀/▶ button.
The ⏪/⏩ button can be used to page up/down the service list.
3. Press the **BLUE** button. The ⏭ icon then appears at the end of the service name. If **BLUE** button is pressed again, the ⏭ icon disappears.
4. Press the **OK** (OK) button to confirm
or press the **EXIT** (EXIT) button to cancel.

Organise Favourite Services

The services are sorted according to the favourite groups in the Organise Favourites menu. There are three columns: the favourite group column, the favourite list column and the service list column containing services that do not belong to any favourite group. The Organise Favourites menu supplies the following functions:

- Add a service to a favourite group.
- Remove a service from a favourite group.
- Move a service to another position in a favourite list.
- Lock a service in a favourite list.
- Skip a service in a favourite list when zapping the service.

To add a service to a favourite group, proceed as follows:

1. Activate the Organise Favourites menu for RADIO services via the Main menu.
2. Move the cursor to the favourite group column using the ◀/▶ button. If the favourite group column is selected, the column is highlighted.
3. Select a favourite group in the favourite group column using the ▲/▼ button.
4. Move the cursor to the service list column using the ◀/▶ button. If the service list column is selected, the column is highlighted.
5. Select the desired service in the service list column using the ▲/▼ button. The ⏪/⏩ button can be used to page up/down the service list. Then press the **OK** () button to move it.
6. Press the **EXIT** () button to confirm.

Main Menu Guide

To remove a service from a favourite group, proceed as follows:

1. Activate the Organise Favourite menu for RADIO services via the Main menu.
2. Move the cursor to the favourite group column using the ◀/▶ button.
If the favourite column is selected, the column is highlighted.
3. Select a favourite group in the favourite group column using the ▲/▼ button.
4. Move the cursor to the favourite list column using the ◀/▶ button.
If the favourite list column is selected, the column is highlighted.
5. Select the desired service in the favourite list column using the ▲/▼ button (the Ⓜ/Ⓜ+ button can be used to page up/down the service list) and press the **RED** button to mark the service.
6. Press the **OK** (OK) button to remove the marked services from a favourite list.

To skip or lock a service in a favourite list, proceed as follows:

1. Activate the Organise Favourite menu for RADIO services via the Main menu.
2. Move the cursor to the favourite group column using the ◀/▶ button.
If the favourite column is selected, the column is highlighted.
3. Select a favourite group in the favourite group column using the ▲/▼ button.
4. Move the cursor to the favourite list column using the ◀/▶ button.
If the favourite list column is selected, the column is highlighted.
5. Select the desired service in the favourite list column using the ▲/▼ button (the Ⓜ/Ⓜ+ button can be used to page up/down the service list) and press the **YELLOW/BLUE** button to lock/skip the service. Press the button again to undo the action.
6. Press the **OK** (OK) button to confirm.



Organise Networks


The Organise Networks menu supplies the following functions:

- Delete the network. This will delete all services belonging to the network.
- Move/reorder the networks in the network list.
- Sort the services according to the network.




In the Organise Networks menu, there are two columns: the network list column and the service list column.

The services are displayed in the service column according to their networks.

To delete the network, proceed as follows:

1. Activate the Organise Networks menu via the Main menu.
2. Move the cursor to the network list column.
3. Select the network name using the ▲/▼ button.
4. Press the **RED** button to mark the selected network.
5. Press the **OK** () button to delete the marked networks.

To move/change the order of the network in the network list, proceed as follows:

1. Activate the Organise Networks menu via the Main menu.
2. Move the cursor to the network list column.
3. Select the network name using the ▲/▼ button.
4. Press the **GREEN** button. The  icon is then displayed beside the network name.
5. Move the network name to the desired position using the ▲/▼ button.
6. Press the **OK** () or **EXIT** () button to confirm.

Main Menu Guide




Delete Satellites

The Delete Satellites menu supplies the following functions:


- Delete a satellite. It will also delete all services belonging to the satellite.
- Delete a transponder. It will also delete all services belonging to the transponder.
- Sort the services according to the satellite and the transponder.

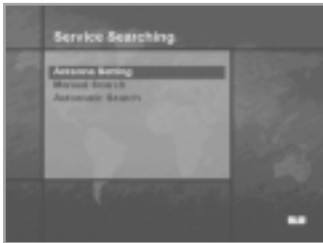
In the Delete Satellite menu, there are three columns: 'SAT' (the satellite list column), "TP (MHz)" (the transponder list column) and "Services" (the service list column).

To delete a satellite, proceed as follows:

1. Activate the Delete Satellite menu via the Main menu.
2. Move the cursor to the satellite list column using the ◀/▶ button.
3. Select the desired satellite name using the ▲/▼ button.
4. Press the **RED** button to mark the satellite name.
5. If all the desired satellite names are marked, press the **OK** () button to delete all the marked satellite names.
6. If all the satellites are to be deleted, mark the "ALL" item.

To delete a satellite transponder, proceed as follows:

1. Activate the Delete Satellite menu via the Main menu.
2. Move the cursor to the transponder list column using the ◀/▶ button.
3. Select the desired transponder name using the ▲/▼ button.
4. Press the **RED** button to mark the transponder name.
5. If all desired transponder names are marked, press the **OK** () button to delete all marked transponders.



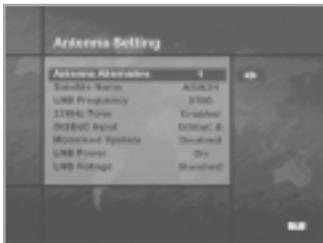
3-3. Service Searching

Antenna Setting

The Antenna Setting menu sets the characteristics of each antenna. 32 antennae can be supported, one of which for SMATV. The Antenna Setting menu supplies the following items to characterise the antenna.

Antenna Alternative

Assigns an index to each antenna. Hence, the value is unique for each antenna. It can assign up to 32 indexes.



Satellite Name

Assigns a satellite name to each antenna. The available satellite names supplied by default can be used. Moreover, the satellite name can be defined by the user with the "User Defined" item.

LNB Frequency

Assigns LNB frequency of LNB in each antenna. It can be set as "Universal", "5150", "9750", "10600", "10750" and "11475". It can also be set as any value using the numeric buttons.



22KHz Tone

Disables/enables the 22KHz tone in the signal line.

DiSEqC Input

It sets the DiSEqC input to select a proper antenna. It can be set as "Tone Burst A", "Tone Burst B", "DiSEqC A", "DiSEqC B", "DiSEqC C" and "DiSEqC D".

Motorised System

Disables/enables the motorise function.

LNB Power

Switches/off the LNB power.

LNB Voltage

Sets the LNB voltage level. The LNB voltage may drop too low to supply power to the LNB due to the long length of the signal cable. To compensate the voltage drop, the item should be set on "High".

Main Menu Guide



Manual Search

The function of the Manual Search menu is to search services in one transponder using information from a satellite transponder. (If the Network Search option is enabled, services in other transponders are searched).

The following items are supplied as parameters:

Antenna Alternative

Specifies the antenna used for searching.

Frequency

Sets the frequency of a transponder.

Polarisation

Sets the polarisation type (horizontal or vertical).

Symbol Rate

Sets the symbol rate of a transponder.

FEC(Forward Error Correction)

Sets the FEC value of a transponder.

Network Search

Enables/disables the network search option. If the option is enabled, all services in other transponders may be searched according to information in the NIT.

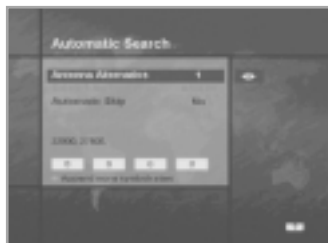
Automatic Skip

Enables/disables the automatic skip option. If this option is enabled, the scrambled services are skipped during the search.

BAT Search

Some operators define the order of services in a list using BAT. If this option is enabled, the services will be ordered according to the BAT information.

Guide of Main Menu



Automatic Search

The function of the Automatic Search menu is to search services using information from a satellite.

The following items are supplied as parameters.

Antenna Alternative

Specifies the satellite in which the automatic search will be performed.

Automatic Skip

Enables/disables the automatic skip option. If this option is enabled, the scrambled services are skipped during the search.



Search Type

Specifies search type. If the search type is "Detail", then four symbol rates are added and used during the search.

Symbol Rate table(optional)

Upsets up to four symbol rates for searching when the search type is "Detail".

To automatically search the services, proceed as follows:

1. Activate the Automatic Search menu.
2. Set all the parameters according to the satellite information.
3. Press the **OK** () button to start the search.
4. Press the **EXIT** () button to cancel during the search.

The Automatic Search may take a long time to search all the services, depending on the parameter settings.

Since the Automatic Search is based on hard-coded information, this information is properly updated to search all services.

To obtain the updated information, please consult the HUMAX web site.

3-4. Status

The function of the Status menu is to supply users with information on several STB statuses, such as:

- Information on the Software version,
- Information on the Hardware version,
- Information on the signal level of the current locked TP,
- Information on OTA availability.



This information is mainly intended for operators or installers.



STB Status

The STB status menu supplies information on the software and hardware versions.

To receive the information, proceed as follows:

1. Activate the Status Menu via the Main menu.
2. Select the Status menu using the ▲/▼ button, then press the **OK** () button to enter the menu.
3. Press the **EXIT** () button to exit the menu.





Signal Detection

The Signal Detection menu supplies information on signal level and signal quality.

This can be used when the antenna is adjusted to the desired satellite as the signal level and quality are maximally high when the antenna is pointed directly at the satellite.

To receive the information, proceed as follows:

1. Activate the Status Menu via the Main menu.
2. Select the Signal Detection menu using the ▲/▼ button, then press the **OK** () button to enter the menu.
3. Press the **EXIT** () button to exit the menu.

STB Upgrade

The OTA can be performed via the STB Upgrade menu.

If there is an available OTA image on the air, the menu may be selected. Otherwise, the menu is greyed out and cannot be selected.

Loader Status

The Loader Status menu supplies information on the loader status.

Main Menu Guide



3-5. Conditional Access

The Conditional Access menu supplies information on IRDETO embedded CAS.



There are four sub-menus in the menu:

- Version Information,
- Smart Card Information,
- Transport Stream Information,
- Monitoring ECM/ECM.

Version Information

The Version Information menu supplies technical information on IRDETO embedded CAS.

To retrieve the information, proceed as follows:



1. Activate the Conditional Access menu via the Main menu.
2. Select the Version Information menu using the ▲/▼ button and press the **OK** () button to retrieve the information.
3. Press the **EXIT** () button to exit the menu.

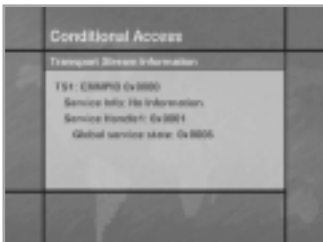


Smart card Information

The Smart card Information menu supplies information on the smart card in the slot, such as serial number and nationality. If there is no smart card or an invalid one in the slot, the menu cannot be entered.

To retrieve the information, proceed as follows:



1. Activate the Conditional Access menu via the Main menu.
2. Select the Smart card Information menu and press the **OK** () button to retrieve the information.
3. Press the **EXIT** () button to exit the menu.



Transport Stream Information

The Transport stream Information supplies information on the current service such as EMM PID and the service status.



To retrieve the information, proceed as follows:

1. Activate the Conditional Access menu via the Main menu.
2. Select the Transport stream Information using the ▲/▼ button and press the **OK** () button to retrieve the information.
3. Press the **EXIT** () button to exit the menu.

Monitoring EMM/ECM


The Monitoring EMM/ECM menu periodically supplies information on the ECM and EMM.

To retrieve the information, proceed as follows:

1. Activate the Conditional Access menu.
2. Select the Monitoring EMM/ECM menu using the ▲/▼ button and press the **OK** () button to retrieve the information.
3. Press the **EXIT** () button to exit the menu.



3-6. Mail Messages


The Mail Messages menu shows the mail messages received over the air. The mail messages are intended for the operator, to inform users. If there is a new mail message available, the  icon appears at the top right corner of the screen. There are four columns in the menu, such as the received date and time (DATE & TIME), view status (VIEW) and the type (TYPE).

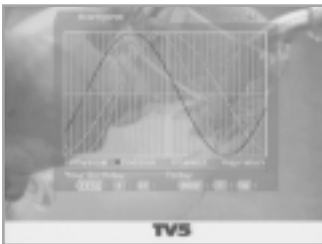
If the mail message has not yet been viewed, a 'U' is marked in the "VIEW" column. In the menu, the mail can be viewed or deleted from the mail list.

The mark 'M' in the "TYPE" column means that the mail message received is a normal mail message.

The mark 'A' in the "TYPE" column means that the received mail message is a message of announcement.

To view or delete the mail message, proceed as follows:

1. Activate the Mail Message menu via the Main menu.
2. Select the desired mail message using the ▲/▼ button.
3. Press the **GREEN** button to view it.
4. Press the **YELLOW** button to delete it.
5. Press the **EXIT** () or **BLUE** button to exit the menu.



4. Utility

The Utility menu supplies two functions: Calendar and Biorhythm.

In "Calendar", the current calendar is displayed on the screen.

The desired month can be chosen using the ▲/▼/◀/▶ button.


In "Biorhythm", if the date of birth is input, the specific biorhythm is displayed on the screen.

Motorised System

DiSEqC 1.2 User Instructions

If you have a DiSEqC 1.2 motorised system, you can use the available DiSEqC 1.2 functions. The following instruction describes how to use the DiSEqC 1.2 functions to store the positions of the satellites and search for the services (STAB Rotor Sat motor recommended).

1. Satellite Setting Menu Options

When the DiSEqC Motorised System is Enabled in the Antenna Setting, a new menu is available for configuring the motor. This menu is called "Satellite Setting" and is accessed by pressing the **OK** () button with the Alternative Antenna option highlighted in the Manual Search menu. The following options are available on the Satellite Setting menu:

Satellite Name

A selection of satellite names that can be used to identify a motor position. If the satellite name you require is not available, please use another one. In installer mode, the Satellite Name Reference refers to the 0 position of the motor.

Movement

In user mode, this is used to fine-tune the position of the motor for better reception. In Installer mode, this is used to manually search for the position of a satellite.

Motor Control

- Search: Searches for services on the chosen transponder.
- Goto: Moves the motor to the stored position of the selected satellite name.
- Store: Stores the current position of the motor for the selected satellite name.
- Reset: Resets all stored positions of the motor relative to the 0 position (Installer mode only).





DiSEqC Command Mode

Changes the current mode between Installer and User.

2. Setting your Receiver for DiSEqC 1.2

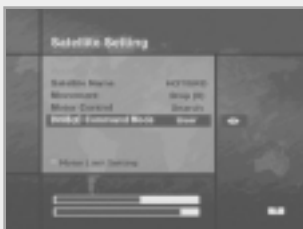
You must set your receiver up so that it is ready to use DiSEqC 1.2. To do so, proceed as follows:









1. Press the **MENU** () button to display the Main menu.
2. Select the Service Searching option and press the **OK** () button to display the Service Searching menu.
3. Select the Antenna Setting option and press the **OK** () button to display the Antenna Setting menu.
4. You must set up a separate alternative antenna for each satellite position required.
5. Select the name of the satellite you wish to use.
6. Select the correct LNB frequency for the LNB you are using.
7. Set the Motorised System to Enable to use the **▲/▼/◀/▶** buttons.
8. The option DiSEqC Input Selection should now be disabled. This option is used for DiSEqC 1.0 and cannot be used in conjunction with DiSEqC 1.2. Your receiver is now ready to use DiSEqC 1.2. To return to the Main Menu, use the **EXIT** () button until you reach the Main menu.

3. Initial Satellite Position Search




This is required when you first set your receiver up to use DiSEqC 1.2, and sets the positions of all pre-programmed satellites.



1. Make sure your motor is installed correctly with the calibrations adjusted for the region in which you are located. (Please consult the user's manual for your motor).
2. Make sure your receiver is set up to use DiSEqC 1.2. (see Section 2 above).
3. In the Main menu, select the Service Searching option and press the **OK** () button. You should now see the Service Searching menu.
4. Highlight the Alternative Antenna option and press the **OK** () button to display the Satellite Setting menu.
5. Highlight the DiSEqC Command Mode option and use the **◀/▶** buttons to change the value to Installer, then press the **OK** () button.
6. Highlight the Motor Control option and use the **◀/▶** buttons to change the value to reset, then press the **OK** () button.
7. You will now see a warning message. Press the **OK** () button to continue. All the pre-programmed satellite motor positions should now be correct. If you have any other DiSEqC 1.2 motor brand or model, then you may need to store the satellite positions yourself. (Please refer to the user's manual for your motor).
8. Highlight the DiSEqC Command Mode option and use the **◀/▶** buttons to change the value to User, then press the **OK** () button.
9. You should now be ready to start storing services for the various satellites (see 5 onwards).

4. Motor Limit Setting

Use this option to set the East and West limits of the motor. This should be used to prevent your dish from hitting anything that may obstruct the path of the dish.

1. On the Main menu, select the Service Searching option and press the **OK** () button. You should now see the Service Searching menu.
2. Select the Manual Search option and press the **OK** () button. You should now see the Manual Search menu.
3. Highlight the Alternative Antenna option and press the **OK** () button. You should now be in the Satellite Settings menu.
4. Press the **RED** button to access the Motor Limit Setting menu.
5. Highlight the Limit Setting option and use the **◀/▶** buttons to disable this. (**Warning:** When this option is disabled, your motor will be able to move beyond any limits previously stored - please make sure there is nothing obstructing the path of your dish.)



Motorised System



6. To set the East Limit:

- a) Select "Movement" and use the ◀/▶ buttons to move your motor East or West until it is at the position you wish to use as your East Limit. Use the ◀/▶ buttons to stop the motor at the correct position.
- b) Highlight the Store East Limit option and press the **OK** (OK) button to store the current position as your East Limit.

To set the West Limit:

- a) Select "Movement" and use the ◀/▶ buttons to move your motor East or West until it is at the position you wish to use as your West Limit. Use the ◀/▶ buttons to stop the motor at the correct position.
- b) Highlight the Store West Limit option and press the **OK** (OK) button to store the current position as your West Limit.

5. Manual Satellite Search

The purpose of this is to set the motor position manually for each satellite.





This is useful if the satellite you require is not available in the pre-programmed list (see 3 above).

To do this, you must access the Satellite Settings menu. Proceed as follows:

1. Select "Service Searching" from the Main menu and press the **OK** (OK) button to display the Service Searching menu.
2. Select the Manual Search option and press the **OK** (OK) button to display the Manual Search menu. Select the relevant Alternative Antenna you are using for this satellite.
3. Enter the Frequency, Polarisation, Symbol Rate and FEC for a transponder on the satellite you wish to find. The transponder information should be unique to the satellite.
4. Select the Alternative Antenna option and press the **OK** (OK) button to display the Satellite Settings menu.
5. Highlight the DiSEqC Command Mode option and, using the ◀/▶ buttons, change this to Installer.
6. Highlight the Satellite name option and use the ◀/▶ buttons to select the satellite you want to find. Use others if the name of the satellite you want does not appear.
7. When you have selected the satellite you are looking for, go down to the Movement option, and again using the ◀/▶ buttons, start the motor moving.
8. You should move the motor as far west as possible and then move it east so that you cover the motor's complete movement range.
9. During the move from west to east, the Signal Quality bar should register a signal once. This is the satellite's position. If there two or more different positions register a signal, then you must choose another frequency that will be unique to the satellite you want.
10. Use the Signal level and Strength Quality bar at the bottom of the screen to judge the best position for the dish.
11. Use the ◀/▶ buttons to stop the motor when required.
12. When you have found the best position for the dish, go to the Motor Control option, and using the ◀/▶ buttons, select "Store" and press the **OK** (OK) button. The position of the satellite should now be stored.
13. If you have not stored this position, it will be lost when you exit the menu.
14. Repeat the process for each satellite if required, remembering to use a different alternative antenna for each satellite.

6. Moving to a pre-set satellite





Once you have stored the positions of the satellites you want (see below left) you can search for the services transmitted from them. Before doing this, you must move the motor to the position of the satellite you wish to search for. To do this, you must access the Satellite Settings menu. Proceed as follows:

1. Select "Service Searching" from the Main menu and press the **OK** () button to display the Service Searching menu.
2. Select the Manual Search option and press the **OK** () button to display the Manual Search menu.
3. Select the Alternative Antenna option and press the **OK** () button to display the Satellite Settings menu.
4. In the Satellite Settings menu ensure that you have the DiSEqC Command Mode option set to "User".
5. Highlight the option Satellite Name and use the **▲/▼/◀/▶** buttons to select the satellite you want to view.
6. When you have selected the satellite you wish to view, go down to the Motor Control option and, using the **◀/▶** buttons again, select "Go to" and press the **OK** () button.
7. The motor will now move to the selected satellite's position.
8. The Movement option is used to fine-tune the motor's position.
9. When using the Movement option for fine-tuning, you must remember to store the changes you have made, otherwise they will be lost.

7. Searching for services on your selected Satellite

Once you have moved the motor into position, you can search for the channels transmitted from the relevant satellite. To search for services on your new selected satellite, proceed as follows:





1. Move the motor to the position of the satellite you wish to search for (see section 6 above):
2. Select "Service Searching" from the Main menu and press the **OK** () button to display the Service Searching menu.
3. Select the manual search option and press the **OK** () button to display the Manual Search menu.
4. Now enter the Frequency and Symbol Rate using the **NUMERIC** buttons (0-9).
Next, enter the Polarisation and FEC values using the **◀/▶** buttons.
5. When you have entered all these details, press the **OK** () button and the search will begin.
6. When the search has finished, press the **OK** () button to view.
7. Repeat the process for all the transponders you want from this satellite.

Motorised System

8. Automatic Search

It is possible to use automatic search using the DiSEqC 1.2 motorised system.

1. Ensure that the position for the satellite you want to search for is correct (see Section 3 and 5 above).
2. In the Main menu, select the channel searching option and press the **OK** () button.
3. In the Service Searching menu, select the Alternative Antenna that you 3set for this satellite.
4. When you search new services, please refer to **Automatic Search** on page GB42.
5. When the search has ended, press the **OK** () button to store and view the services.

Now that you have stored all the satellite positions and searched for all the services you want, you can use your receiver as normal. When you change to a service transmitted from a different satellite, you will have to wait a few seconds to allow the motor to move into position to receive the new service.

Troubleshooting Guide

Problem	Solution
About STB	
Does not display any LED on the front panel or STB has no power.	<ul style="list-style-type: none"> • Check the main power cable and check that it is plugged into a suitable power outlet. • Check whether STB is in Standby mode.
No Picture	<ul style="list-style-type: none"> • Ensure that the STB is switched on (see above). • Check the video output port (RCA/RF) is firmly connected to the TV or VCR. • Check that you have selected the correct channel or Video Output on your TV. • Check the brightness level of the TV.
Poor picture quality	<ul style="list-style-type: none"> • See "No Picture" above. • Check the signal level, if this is low then try adjusting the alignment of your dish.
No Sound	<ul style="list-style-type: none"> • See "No Picture" above. • Check the volume level of the TV and STB. • Check the Mute status of the TV and STB.
Remote Control does not operate	<ul style="list-style-type: none"> • Point remote control directly towards the STB. • Check and replace batteries.
On-Screen Error Messages	
No or Bad Signal	<ul style="list-style-type: none"> • Check the LNB - replace LNB if necessary. • Check the cable from the LNB. • Check the position of the dish - realign dish if necessary. • If you are using a DiSEqC 1.0 switch, check that you have connected the LNBs to the correct connections on the switch. • Check the "Signal Level" and the "Signal Quality" in the Signal Status menu.
Service Search	
"No Signal" in Manual Search	<ul style="list-style-type: none"> • Check the "Signal Level" and the "Signal Quality" in the Signal Status menu. • Check the LNB - replace LNB if necessary. • Check the cable from the LNB. • Check the position of the dish - realign dish if necessary. • DiSEqC 1.0 Check that you have connected the LNBs to the correct connections on the switch. Check that you have set the connected setting in the Antenna Setting menu. • DiSEqC 1.2 Check that you have selected this in the Antenna Setting menu. Check that the dish is aimed at the correct satellite.
LED Error Message	
Amber only: Invalid system ID	<ul style="list-style-type: none"> • Check whether the system ID is different for Software and STB.
Amber & Red: Incorrect data block CRC error	<ul style="list-style-type: none"> • You need to contact your retail shop.
Amber & Red & Green: Incorrect application CRC error	<ul style="list-style-type: none"> • You need to contact your retail shop.

• If you can't solve the problem even referring this Troubleshooting Guide, contact us via our homepage.

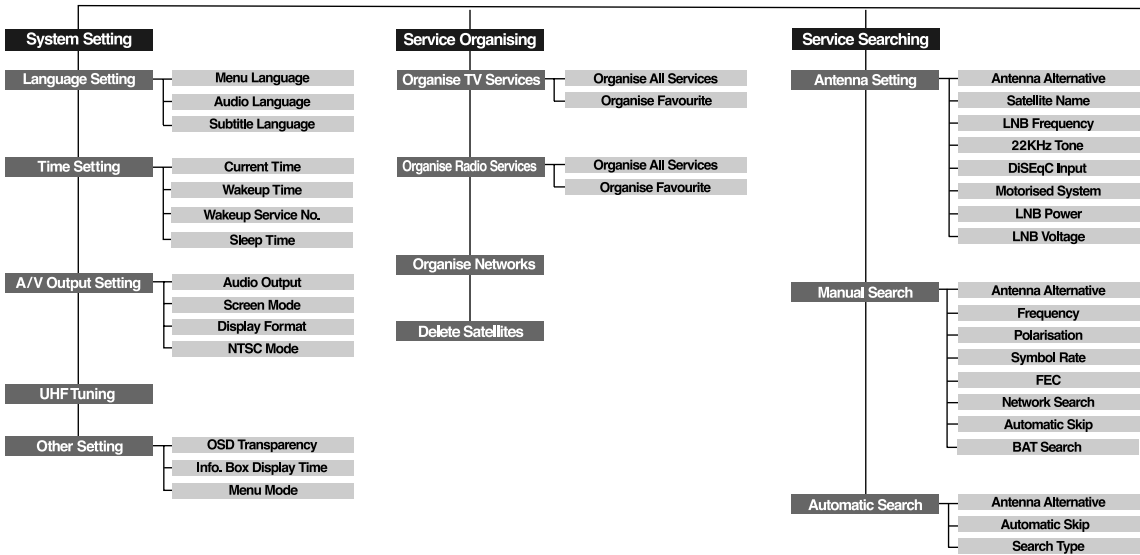
Homepage : <http://www.humaxdigital.com>

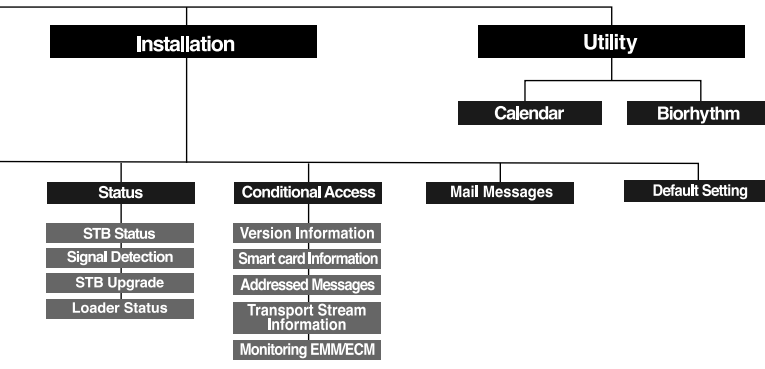
Menu Map

MAIN MENU

TV Guide

Parental Control





Specification

Conditional Access Interface

Irdeto Embedded	1 Slot Smart card
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Tuner & Channel

Input Connector	F-type, IEC 169-24, Female
Frequency Range	950 MHz to 2150 MHz
Input Impedance	75Ω
Signal Level	-25 to -65 dBm
IF	480 MHz
IF Band width	36 MHz
LNB Power & Polarisation	Vertical : +13.5 V Horizontal : +18 V Current : 500 mA Max. Overload Protection
22 KHz Tone	Frequency : 22 ± 4 KHz Amplitude : 0.6 ± 0.2 V
DiSEqC Control	Version 1.0/1.2 Compatible
Demodulation	QPSK
Input Symbol Rate	1-45 Ms/s
FEC Decode	Convolutional Code Rate 1/2, 2/3, 3/4, 5/6 and 7/8 with Constraint Length K=7

MPEG Transport Stream A/V Decoding

Transport Stream	MPEG-2 ISO/IEC 13818 Transport stream specification
Profile Level	MPEG-2 MP@ML
Input Rate	15 Mbit/s Max
Aspect Ratio	4:3, 16:9
Video Resolution	720 x 576
Audio Decoding	MPEG/MusiCam Layer I & II
Audio Mode	Single channel/Dual channel/Joint stereo/Stereo
Sampling	32, 44,1 and 48 KHz

Memory

Main Processor	TMIPS R3930 (81 MHz)
Flash Memory	4 Mbyte
Graphic(MPEG) DRAM	4 Mbyte
System DRAM	8 Mbyte

- **Please note:** The specification of the STB may be changed without advance notice.

A/V & Data In/Out

VIDEO	RCA / Cinch Video Output (CVBS)
AUDIO R/L	RCA/Cinch Volume and Mute Control (Resolution : 20 bits DAC, Max. 2 Vrms)
RS-232C	Transfer rate 115,200 bps, 9pin D-sub Type

Power Supply

Input Voltage	90 - 250V AC, 50/60 Hz
Type	SMPS
Power Consumption	Max. 30 W
Standby Power	≤ 9 W
Protection	Separate internal fuse. The input should be protected against lightning

Physical Specifications

Size (W x H x D)	260 x 50 x 182 mm (IR-ACE) 310 x 60 x 225 mm (IR-ACE M)
Weight (Net)	Around 3.0 kg
Operating Temp	0°C to + 45°C
Storage Temp	-10°C to + 70°C
Storage Humidity	5% ~ 95% RH (Non-Condensing)

- You can use a special antenna switch with DiSEqC commands.
When changing ASTRA1 to EUTELSAT, for example, a DiSEqC command is sent with the 22KHz tone via the antenna cable. The antenna switch will change ASTRA1 to EUTELSAT. The DiSEqC concept is a protective trademark of EUTELSAT.
- Data rate decides the picture quality of digital TV programmes.
The data rate of about 5-6 Mbit/s coincides with the picture quality of an analogue TV programme.

